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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
FLOHRE, JASON A	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/552,349	SOLER ET AL.	
	Examiner	Art Unit	
	JASON FLOHRE	4112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein (United States Patent Application Publication 2002/0012059), hereinafter referenced as Wallerstein, in view of Peleg et al. (United States Patent 6,795,109), hereinafter referenced as Peleg.

Regarding claim 1, Wallerstein discloses an imaging arrangement which allows for capturing an image of a view at different resolutions. Specifically Wallerstein discloses an apparatus (10) with panoramic imaging arrangement (14), wherein the apparatus and lens read on "a system for capturing an image (42) acquired by a simply connected wide-field optical system (1) consisting of an afocal lens with angular enlargement of less than 1 and supplying a wide-field first light beam (4)", as disclosed at paragraph 21, lines 3-5 and exhibited in figure 6. Wallerstein also discloses Pechan prism (116) which reads on "means for selecting from said first beam (4) a second light beam (4') corresponding to a narrow field within said wide field and showing a region of interest (52) of said image (42)", as disclosed at paragraph 62, lines 1-3 and exhibited in figure 6. Wallerstein also discloses half silvered mirror (112) which reads on "means (5) for duplicating said wide-field first light beam (4) to produce a duplicate first beam (6)",

as disclosed at paragraph 60, lines 4-6 and exhibited in figure 6, however, Wallerstein fails to disclose a first video camera (20) including a lens (21) adapted to capture said narrow-field second beam (4') with a first resolution; a second video camera (10) including a lens (11) adapted to capture the whole of said duplicate first beam (6) with a second resolution lower than said first resolution by a reduction coefficient defined by the ratio between said wide field and said narrow field, said second video camera (10) and said first video camera (20) preferably having identical photosensitive element matrices (21, 22). However, the examiner maintains that it was well known in the art to provide a first video camera (20) including a lens (21) adapted to capture said narrow-field second beam (4') with a first resolution; a second video camera (10) including a lens (11) adapted to capture the whole of said duplicate first beam (6) with a second resolution lower than said first resolution by a reduction coefficient defined by the ratio between said wide field and said narrow field, said second video camera (10) and said first video camera (20) preferably having identical photosensitive element matrices (21, 22), as taught by Peleg.

In a similar field of endeavor Peleg discloses a stereo panoramic camera arrangement. In addition, Peleg discloses identical cameras (134L & 134R) which read on "said second video camera (10) and said first video camera (20) preferably having identical photosensitive element matrices (21, 22)", as disclosed at column 12, lines 42-44 and exhibited in figure 13, however, Peleg fails to disclose lenses of different resolutions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein by specifically providing said second video camera and said first video camera preferably having identical photosensitive element matrices, as taught by Peleg, for the purpose of lowering the cost of the device Having two identical matrices of a lower resolution is cheaper than having a second with a higher resolution (smaller pixels = more cost).

However, the examiner takes Official Notice of that fact that it was well known in the art to provide lenses of different resolutions. It is also well known that cameras with the same sensor can be made to have these lenses in order to capture images based on the desired resolution. It would be obvious to one of ordinary skill in the art to provide a first camera that has a lens with a first resolution and that a second camera could have a second resolution which reads on "a first video camera (20) including a lens (21) adapted to capture said narrow-field second beam (4') with a first resolution; a second video camera (10) including a lens (11) adapted to capture the whole of said duplicate first beam (6) with a second resolution lower than said first resolution by a reduction coefficient defined by the ratio between said wide field and said narrow field".

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing a first video camera (20) including a lens (21) adapted to capture said narrow-field second beam (4') with a first resolution; a second video camera (10) including a lens (11) adapted to capture the whole of said duplicate first beam (6) with a second resolution lower than said first resolution by a reduction coefficient defined by the ratio between

said wide field and said narrow field, as taught by well known prior art, for the purpose of lowering the cost of the device (two lenses of different resolutions is less expensive then two sensors of different resolutions).

Regarding claim 3, the combination discloses everything claimed as applied above (see claim 1), in addition Wallerstein discloses Pechan prism (116) which is rotated by electric motor (114) to select a narrow field which is captured by said first video , which reads on “said first video camera (20) being stationary, said selection means include deflection means for deflecting said second beam (4’) towards said first video camera (20)", as disclosed at paragraph 64, lines 3-7 and exhibited in figure 6.

Regarding claim 4, the combination discloses everything claimed as applied above (see claim 3), the Pechan prism disclosed (see claim 3) reads on “said deflection means comprise a prism, mirror, or any type of diffraction system rotatable in said first beam (4).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein in view of Peleg and further in view of Glatt (United States Patent 6,724,421), hereinafter referenced as Glatt.

Regarding claim 7, Wallerstein in view of Peleg disclose everything claimed as applied above (see claim 1), however the combination fails to disclose means for processing said image adapted to detect a movement and/or a variation of luminous intensity in said image (42) and to command said selection means accordingly. However, the examiner maintains that it was well known in the art to provide disclose means for processing said image adapted to detect a movement and/or a variation of

luminous intensity in said image (42) and to command said selection means accordingly, as taught by Glatt.

In a similar field of endeavor Glatt discloses a video surveillance system with pilot and slave cameras. In addition, Glatt discloses a method locating an object in motion, as disclosed at column 4, lines 17. Glatt also discloses that after the moving object is located, the computer (41) instructs a slave camera (16, 18, 20 and 22) to point at the object, as disclosed at column 4, lines 21-23 and exhibited in figure 3. This reads on "means for processing said image adapted to detect a movement and/or a variation of luminous intensity in said image (42) and to command said selection means accordingly. ".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing means for processing said image adapted to detect a movement and/or a variation of luminous intensity in said image (42) and to command said selection means accordingly, as taught by Glatt, for the purpose of removing the need of having an operator monitoring the system at all times to monitor movement with the narrow-field camera.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein in view of Peleg and further in view of Kahn et al. (United States Patent 7,365,771), hereinafter referenced as Kahn.

Regarding claim 8, Wallerstein in view of Peleg disclose everything claimed as applied above (see claim 1), however, the combination fails to disclose that said optical

system (1) and said first video camera (10) are adapted to capture first and second infrared light beams (4, 4'). However, the examiner maintains that it was well known in the art to provide that said optical system (1) and said first video camera (10) are adapted to capture first and second infrared light beams (4, 4'), as disclosed by Kahn.

In a similar field of endeavor Kahn discloses a camera with visible and infra-red imaging. In addition, Kahn discloses infra-red reducing lens (7) and infra-red sensor array (8) as disclosed at column 8, line 8 and exhibited in figure 1. By adding the infra-red reducing lens to the optical path, and using the infra-red sensor in the first video camera, the above reads on "said optical system (1) and said first video camera (10) are adapted to capture first and second infrared light beams (4, 4')".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing said optical system (1) and said first video camera (10) are adapted to capture first and second infrared light beams (4, 4'), as taught by Kahn, for the purpose of enhancing images captured during low light conditions by removing noise caused by visible light.

Claims 2, 5, 6, and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein in view of Peleg and further in view of Palmer JR. et al. (United States Patent Application Publication 2006/0028550), hereinafter referenced as Palmer.

Regarding claim 2, Wallerstein in view of Peleg disclose everything claimed as applied above (see claim 1), however, the combination fails to disclose that said first

video camera (20) being mobile, said selection means include means (60, 61, 71, 73) for positioning said first video camera (20) in a position (Θx, Θy) such that it receives said second beam (4'). However, the examiner maintains that it was well known in the art to provide wherein said first video camera (20) being mobile, said selection means include means (60, 61, 71, 73) for positioning said first video camera (20) in a position (Θx, Θy) such that it receives said second beam (4'), as taught by Palmer.

In a similar field of endeavor Palmer discloses a surveillance system and method. In addition, Palmer discloses a PTZ (pan tilt zoom) camera (22) as disclosed at paragraph 65, line 2 and exhibited in figure 2. It is understood that a PTZ camera has the ability to move in the horizontal and vertical (x and y) directions. Palmer also discloses equirectangular image (100) taken by camera system (10) as disclosed at paragraph 62, lines 9-11 and exhibited in figure 8A. Palmer continues to disclose that by using a mouse (wherein a mouse is equivalent to a joystick) the user may indicate a region of interest by clicking on the mouse when the arrow is positioned in one of the wide angle images (100 or 102). Such user input will be communicated to the processor (6) for orienting the PTZ camera system (20) to capture an image corresponding to the region of interest indicated by the user input, as disclosed at paragraph 65, lines 8-15. The above disclosures read on " said first video camera (20) being mobile, said selection means include means (60, 61, 71, 73) for positioning said first video camera (20) in a position (Θx, Θy) such that it receives said second beam (4')" if we replace the prism and motor of Wallerstein with the PTZ capabilities of Palmer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing said first video camera (20) being mobile, said selection means include means (60, 61, 71, 73) for positioning said first video camera (20) in a position (Θx, Θy) such that it receives said second beam (4'), as taught by Palmer, for the purpose of giving the user precise control of the location of the first camera.

Regarding claim 5, Wallerstein in view of Peleg disclose everything claimed as applied above (see claim 1), however, the combination fails to disclose that the first video camera (20) includes an optical zoom system for defining the angular magnitude of said region of interest (52). However, the examiner maintains that it was well known in the art to provide that the first video camera (20) includes an optical zoom system for defining the angular magnitude of said region of interest (52), as taught by Palmer.

In a similar field of endeavor Palmer discloses a surveillance system and method. In addition, Palmer discloses a PTZ (pan tilt zoom) camera (22) as disclosed at paragraph 65, line 2 and exhibited in figure 2. It is understood that a PTZ camera has the ability to optically zoom in on a subject. Therefore, the PTZ camera reads on "that the first video camera (20) includes an optical zoom system for defining the angular magnitude of said region of interest (52)".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing that the first video camera (20) includes an optical zoom system for defining

the angular magnitude of said region of interest (52), as taught by Palmer, for the purpose of enhancing the image quality of images containing objects of different sizes.

Regarding claim 6, Wallerstein in view of Peleg disclose everything claimed as applied above (see claim 1), however, the combination fails to disclose that it further includes a station (43) for viewing said image (42) in the vicinity of control means (83) of said selection means. However, the examiner maintains that it was well known in the art to provide that it further includes a station (43) for viewing said image (42) in the vicinity of control means (83) of said selection means, as taught by Palmer.

In a similar field of endeavor Palmer discloses a surveillance system and method. In addition, Palmer discloses equirectangular image (100) taken by camera system (10) is shown on a display as disclosed at paragraph 62, lines 1-2, lines 9-11 and exhibited in figure 8A. Palmer continues to disclose that by using a mouse (wherein a mouse is equivalent to a joystick) the user may indicate a region of interest by clicking on the mouse when the arrow is positioned in one of the wide angle images (100 or 102). Such user input will be communicated to the processor (6) for orienting the PTZ camera system (20) to capture an image corresponding to the region of interest indicated by the user input, as disclosed at paragraph 65, lines 8-15. The display that Palmer discloses reads on "a station (43) for viewing said image (42)". Palmer discloses that the camera systems (10, 20), processor (6), user interface (8), and other parts of the image capture and display system (2) may be in communication via any suitable means, mode, method, or medium as disclosed at paragraph 17, lines 1-4. This means that the display could be placed as near or as far away from the cameras

as the user so chooses which would read on "in the vicinity of control means (83) of said selection means".

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing that it further includes a station (43) for viewing said image (42) in the vicinity of control means (83) of said selection means, as taught by Palmer, for the purpose of allowing the user to see in real time where the camera is moving in relation to the panoramic image.

Regarding claim 9, Wallerstein in view of Peleg disclose everything claimed as applied above (see claim 1), however, the combination fails to disclose a system for capturing an image covering a 360 degree space, characterized in that it comprises two capture systems (A, A') arranged back-to-back. However, the examiner maintains that it was well known in the art to provide a system for capturing an image covering a 360 degree space, characterized in that it comprises two capture systems (A, A') arranged back-to-back, as taught by Palmer.

In a similar field of endeavor Palmer discloses a surveillance system and method. In addition, Palmer discloses two fisheye lens (14) positioned back-to-back, with each lens having at least a hemispherical field of view, which reads on “provide a system for capturing an image covering a 360 degree space, characterized in that it comprises two capture systems (A, A') arranged back-to-back”, as disclosed at paragraph 19, lines 4-5 and 8-9 and exhibited in figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wallerstein in view of Peleg by specifically providing a system for capturing an image covering a 360 degree space, characterized in that it comprises two capture systems (A, A') arranged back-to-back, as taught by Palmer, for the purpose of allowing a single system capture an image of a 360 degree space while eliminating any 'blind spots' in the field of view.

Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallerstein in view of Peleg, Glatt, and Kahn, further in view of Palmer JR

Regarding claims 10-16, the claims depend from the above rejected claims, further the limitations provided are the same as provided in claim 9. Thus they are interpreted and rejected for the same reasons.

Response to Arguments

In view of applicant's amendments and arguments all 112 rejections are respectfully withdrawn.

Applicant's arguments filed 27 March 2009 have been fully considered but they are not persuasive. Specifically, in response to the applicant's request for the examiner to provide art to demonstrate the official notice, the examiner presents Ledley (United States Patent Re. 34,622), hereinafter referenced as Ledley. Ledley teaches a split-image multi-power image display system. Ledley teaches a first video camera (22) with a first lens (38), used to capture a first narrow beam of duplicated beam and second camera (34) with a second lens (26) used to capture whole of said first beam. This demonstrates the examiner's claim to official notice that it was well known in the art to

provide lenses of different resolutions. It is also well known that cameras with the same sensor can be made to have these lenses in order to capture images based on the desired resolution. It would be obvious to one of ordinary skill in the art to provide a first camera that has a lens with a first resolution and that a second camera could have a second resolution. The above cited rejection (see claim 1) more than adequately meets the claim limitations.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON FLOHRE whose telephone number is (571)270-7238. The examiner can normally be reached on Monday to Thursday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 517-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan V Ho/
Primary Examiner, Art Unit 2622

/JAF/